IN THE CLAIMS:

Claims 1-3 (Cancelled).

4. (currently amended) A control device to optimize load image generation in an electrophotographic process, comprising:

a light-sensitive and temperature-sensitive photoconductor layer for pixel-by-pixel exposure with a temperature-sensitive light source;

the photoconductor layer being more sensitive with rising temperature, such that given a predetermined quantity of light and predetermined charge it discharges deeper;

the light source emitting a lesser luminous power with rising temperature given a same actuation power;

a respective temperature compensation for the light source and for the photoconductor layer;

the temperature compensation for the photoconductor layer being at least one of adapting current flowing through the light source and adapting exposure time of the light source;

the temperature compensation for the light source being at least one of correction of the current flowing through the light source and a change of the exposure time;

for the temperature compensation of the photoconductor layer a measurement event which measures a discharge depth of the photoconductor layer given predetermined luminous duration and predetermined current through the light source;

a temperature of the light source measured in the course of the measurement event being used as a reference value for the temperature compensation of the light source; and

~~The control device according to claim 1 wherein~~ light energy of the light source ~~is~~ being held constant between successive discharge depth measurements.

5. (currently amended) The control device according to claim 4 wherein the temperature-dependent regulation of the light source occurs via the current flowing through the light source, whereby in a calculating unit, as a function of a variation of the reference temperature, a correction ~~therm~~ term is introduced that effects a predetermined light energy change, the correction ~~therm~~ term being discontinued when the measurement of the discharge depth occurs.

6. (currently amended) A control device to optimize load image generation in an electrophotographic process, comprising:

a light-sensitive and temperature-sensitive photoconductor layer for pixel-by-pixel exposure with a temperature-sensitive light source;

the photoconductor layer being more sensitive with rising temperature, such that given a predetermined quantity of light and predetermined charge it discharges deeper;

the light source emitting a lesser luminous power with rising temperature given a same actuation power;

a respective temperature compensation for the light source and for the photoconductor layer;

the temperature compensation for the photoconductor layer being at least one of adapting current flowing through the light source and adapting exposure time of the light source;

the temperature compensation for the light source being at least one of correction of the current flowing through the light source and a change of the exposure time;

for the temperature compensation of the photoconductor layer a measurement event which measures a discharge depth of the photoconductor layer given predetermined luminous duration and predetermined current through the light source;

a temperature of the light source measured in the course of the measurement event being used as a reference value for the temperature compensation of the light source; and

~~The control device according to claim 1 designed such that~~ in an operating phase of lesser temperature than a nominal temperature T_{limit}, a temperature overcompensation occurs for the light source such that the activation power is dynamically superproportionally raised.

7. (original) The control device according to claim 6 wherein a trigger voltage for the luminous power occurs according to a formula

$$V_{I\,LED} = V_{base} + V_{corr}(T_{REF}-T_{current}) + V_{corr}(T_{limit}-MIN(T_{limit};T_{current}))$$

where

$V_{I\,LED}$ = control voltage

V_{base} = base voltage

V_{corr} = temperature coefficient for the luminous power stabilization

T_{REF} = current reference temperature

$T_{current}$ = current measured temperature

T_{limit} = boundary temperature in which the dynamic superproportional luminous power increase ends.

Claims 8-11 (cancelled).

12. (currently amended) A method for optimizing load image generation in an electrophotographic process, comprising the steps of:

providing a light-sensitive and temperature-sensitive photoconductor layer for exposure pixel-by-pixel with a temperature-sensitive light source;

the photoconductor layer becoming more sensitive with rising temperature such that given a predetermined quantity of light and predetermined charge it discharges deeper;

the light source emitting a lesser luminous power with rising temperature given a same actuation power;

providing a respective temperature compensation for the light source and for the photoconductor layer;

providing the temperature compensation for the photoconductor layer by at least one of adapting current flowing through the light source and adapting exposure time of the light source;

providing the temperature compensation for the light source by at least one of correction of current flowing through the light source and change of exposure time;

for the temperature compensation of the photoconductor layer, providing a measurement event in which a discharge depth of the photoconductor layer is

predetermined given predetermined luminous duration and predetermined current through the light source;

using a temperature of the light source measured in the course of the measurement event as a reference value for the temperature compensation of the light source; and

~~The method according to claim 10 wherein~~ in an operating phase of lesser temperature than a nominal temperature T_{limit}, a temperature over-compensation ~~occurs~~ occurring for the light source such that the activation power is dynamically increased until the nominal temperature is reached.

13. (currently amended) A method for optimizing load image generation in an electrophotographic process, comprising the steps of:

providing a light-sensitive and temperature-sensitive photoconductor layer for exposure pixel-by-pixel with a temperature-sensitive light source;

the photoconductor layer becoming more sensitive with rising temperature such that given a predetermined quantity of light and predetermined charge it discharges deeper;

the light source emitting a lesser luminous power with rising temperature given a same actuation power;

providing a respective temperature compensation for the light source and for the photoconductor layer;

providing the temperature compensation for the photoconductor layer by at least one of adapting current flowing through the light source and adapting exposure time of the light source;

providing the temperature compensation for the light source by at least one of correction of current flowing through the light source and change of exposure time;

for the temperature compensation of the photoconductor layer, providing a measurement event in which a discharge depth of the photoconductor layer is predetermined given predetermined luminous duration and predetermined current through the light source;

using a temperature of the light source measured in the course of the measurement event as a reference value for the temperature compensation of the light source; and

~~The method according to claim 10 wherein~~ in an operating phase of lesser temperature than a nominal temperature $T_{limit,}$ a temperature over-compensation occurs for the light source such that the activation power is dynamically increased superproportionally.

Claims 14-15 (cancelled).

16. (new) A computer program product for optimizing load image generation in an electrophotographic process wherein a light-sensitive and temperature-sensitive photoconductor layer are provided for exposure pixel-by-pixel with a temperature-sensitive light source, the photoconductor layer being more sensitive with rising temperature such that given a predetermined quantity of light and predetermined charge it discharges deeper, and the light source emitting a lesser luminous power with rising temperature given a same actuation power, said computer program product comprising:

a program on a computer readable media; and

said program

providing temperature compensation for the photoconductor layer by controlling at least one of an adaption of current flowing through the light source and an adaption of exposure time of the light source,

providing temperature compensation for the light source by at least one of correcting current flowing through the light source and changing exposure time,

for said temperature compensation of the photoconductor layer controlling provision of a measuring event in which a discharge depth of the photoconductor layer is predetermined given predetermined luminous duration and predetermining current through the light source,

using a temperature of the light source measured in the course of the measurement event as a reference value for the temperature compensation of the light source, and

holding light energy of the light source constant between successive discharge depth measurements.

17. (new) A computer program product for optimizing load image generation in an electrophotographic process wherein a light-sensitive and temperature-sensitive photoconductor layer are provided for exposure pixel-by-pixel with a temperature-sensitive light source, the photoconductor layer being more sensitive with rising temperature such that given a predetermined quantity of light and predetermined charge it discharges deeper, and the light source emitting a lesser luminous power with rising temperature given a same actuation power, said computer program product comprising:

a program on a computer readable media; and

said program

providing temperature compensation for the photoconductor layer by controlling at least one of an adaption of current flowing through the light source and an adaption of exposure time of the light source,

providing temperature compensation for the light source by at least one of correcting current flowing through the light source and changing exposure time,

for said temperature compensation of the photoconductor layer controlling provision of a measuring event in which a discharge depth of the photoconductor layer is predetermined given predetermined luminous duration and predetermining current through the light source,

said computer program using a temperature of the light source measured in the course of the measurement event as a reference value for the temperature compensation of the light source, and

said computer program in an operating phase of lesser temperature than a nominal temperature T_{limit} , controlling a temperature over compensation for the light source such that the activation power is dynamically superproportionally raised.